

Title (en)
CURABLE INK COMPOSITION, CURED MATERIAL AND NANOCOMPOSITE

Title (de)
HÄRTBARE TINTENZUSAMMENSETZUNG, GEHÄRTETES MATERIAL UND NANOVERBUNDSTOFF

Title (fr)
COMPOSITION D'ENCRE DURCISSABLE, MATÉRIAU DURCI ET NANOCOMPOSITE

Publication
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Application
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Abstract (en)
[origin: EP4019558A1] The objective of the invention is to provide a curable ink composition capable of forming a cured product with a high refractive index and applicable to the inkjet method, a cured product of the curable ink composition, and a nanocomposite having a film composed of the cured product of the curable ink composition. In this invention, in a curable ink composition including a photopolymerizable compound (A) and metal compound nanocrystals (B), using a sulfide compound (A1) having specific structure and a (meth)acrylate compound (A2) as the photopolymerizable compound (A), and using zirconium oxide nanocrystals as the metal compound nanocrystals (B), and accomplished the present invention.

IPC 8 full level
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Citation (search report)

- [Y] JP 2009120832 A 20090604 - MITSUBISHI CHEM CORP
- [Y] JP 2009102550 A 20090514 - MITSUBISHI CHEM CORP
- [I] WO 2017136711 A1 20170810 - PIXELLIGENT TECH LLC [US]
- See references of WO 2021039783A1

Cited by
EP4130073A4

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